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(74) Agent: JUNG, Won-Ki; Hankook Bldg., 8th Fl., 831-3 Yeoksam-dong, Kangnam-gu, Seoul 135-080 (KR).

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(71) Applicants and

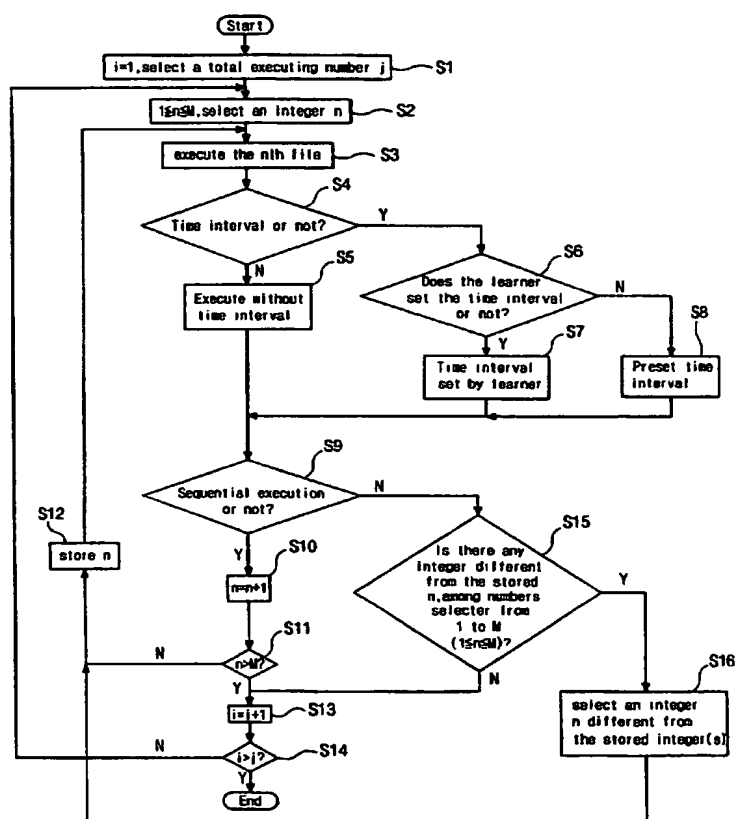
(72) Inventors: KO, Yoon-Yong [KR/KR]; 103/1003 Sachansensibil, Sinammaul, Poongamjigoo, 1054 Poongam-dong, So-gu, Kwangju 502-156 (KR). BAE Sang-Hyun [KR/KR]; 202/1101 Kumho Apt., Bong-sun2-dong, Nam-gu, Kwangju 503-062 (KR).

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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR TRAINING FOREIGN LANGUAGES



(57) Abstract: The present invention relates to a foreign language training apparatus and the method. The purpose of the invention is to provide a foreign language training apparatus and the method that can enhance the efficiency of studying foreign languages. The invention provides the apparatus comprising: storage including a plurality of multimedia files for learning languages and a program for executing the multimedia files; checking means for checking executing time of the multimedia files; an input for inputting a control signal; a controller that selects a first file of the group of files from the storage, executes the first file using the program, selects and executes a second file after a predetermined time dependent on the executing time of the first file checked by the checking time means according to the control signal; and an output for outputting the executed multimedia files.

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[TITLE OF INVENTION]

Method and apparatus for training foreign languages.

[TECHNICAL FIELD]

This invention relates to a method and an apparatus for training in foreign languages, and more specifically to the foreign language-training method and apparatus using a computer or a multimedia device.

[BACKGROUND ART]

As world communication and transport technologies develop, interchange among nations rapidly rises regardless of each nation's territory. Therefore, each nation has recently become more concerned about interchange conversation with other nations. English, Japanese, French, and German are mainly used as common and business languages for the global community. As a result, other nations endeavor to learn these commonly used languages.

The present invention relates to a language training method and an apparatus thereof that have been developed to satisfy the above-mentioned need for learning foreign languages. A cassette tape recorder, a video, or a CD (compact disk) player is conventionally used for the language learning method, and a telephone or an internet-aided language instruction system has been used recently for an improved language learning method.

Each of the above-mentioned conventional methods usually provides a set of trained speech models for learners to practice speaking during a predetermined time. In the conventional methods, the length of the speech model composed in a foreign language is not limited, but a time interval for the learner to practice the speech model is predetermined as a definite time, for example, 8 seconds. The predetermined time interval is too short for the learner to practice a long sentence, or is too long for the learner to practice a short sentence, thereby making the learner bored and deteriorating efficiency of the training.

In another aspect, no language training apparatus is suggested to control training speed depending on each learner's attainment for the training as well as one's ability.

Further, in the conventional methods, the set of trained speech models are sequentially repeated such that the learner practices each speech model in the same order, or questions are sequentially asked for the learner of a foreign language such that the learner answers each of them in the same order. However, the above-mentioned techniques make the learner bored, and experienced learners who remember the sequence of conversation or questions may remind a next question or sentence, thereby deteriorating effects of training.

In another aspect, the ability to interpret is important for international trade relations and training therefore is effective for learning a foreign language. However, there exists no language training method and apparatus for training learners to interpret.

Accordingly, the present invention is contrived to overcome the above-mentioned problems of the conventional art. It is an object of the present invention to provide a foreign language training method and an apparatus thereof that enhance the efficiency of learning foreign languages.

To achieve the above-mentioned object, the present invention provides a foreign language training apparatus, which includes: a storage portion storing a plurality of language lesson multimedia files and a program used for executing the multimedia files; a means for checking executing time of the multimedia files; a control portion that, depending on input control signals, selects a first file among the plurality of files stored in the storage portion, executes the first file using the program stored in the storage portion, executes a second file different from the first file after a time passes in accordance with the first file executing time checked by the checking means; a multimedia output portion outputting the executed multimedia files depending on an output control signal applied from the control portion; and an input portion inputting the input control signals to the control portion.

The above-mentioned multimedia files are motion picture files or image files both including voice files. Native language voice files are preferably selected for the sake of better interpretation training or translation training, though foreign language voice files can be selected.

The present invention has a characteristic of detecting time information of the multimedia files and setting a time interval on the basis of the time information.

The present invention provides a foreign language training method using a multimedia having a plurality of language lesson multimedia files, the method including: a step of executing a first file of the plurality of multimedia files using the

multimedia; a step of checking the executing time of the first file; and a step of executing a second file using the multimedia after a time passes in accordance with the checked executing time.

It is preferred for the above-mentioned method that an executing file is randomly selected among the plurality of multimedia files without repetition until all the files are executed. After each of the files is executed once, all the files are preferably repeated depending on a user's request.

[BRIEF DESCRIPTION OF DRAWINGS]

FIG. 1 is a block diagram of the present invention.

FIG. 2 is a flow chart showing a foreign language training method of the present invention.

* Brief explanation of reference numerals for main portions in the drawings

*

1. Storage portion.

3. Timer.

5. Control portion.

7. Multimedia output portion.

9. Input portion.

[BEST MODE FOR CARRYING OUT THE INVENTION]

Referring now to the drawings, the present invention is explained in detail.

FIG. 1 is a block diagram showing a conceptual configuration of a foreign language training apparatus according to a first preferred embodiment of the present invention. As shown, the apparatus according to the first preferred embodiment

includes: a storage portion (1) having a plurality of language lesson multimedia files (11) and a program (13) executing the multimedia files; a timer (3) checking executing time of the multimedia files; a control portion (5) that, depending on input control signals, executes a first file selected among the plurality of files (11) stored in the storage (1), orders the timer (3) to check the executing time of the first executed file, and executes a second file that is different from the first file after a time passes in accordance with a first file executing time checked by the timer (3); a multimedia output portion (7) outputting the executed multimedia files depending on an output control signal applied from the control portion (5); and an input portion (9) inputting the input control signals to the control portion (5).

The multimedia files (11) stored in the storage portion (1) are motion picture files including voice files. Foreign language lesson data is stored in the multimedia files, and the foreign language lesson data is preferably composed in a native language to enable training in interpretation or translation. The above-mentioned data may be loaded in the apparatus according to the preferred embodiment via a CD ROM (compact disc read only memory) or a communication network such as the internet. That is to say, the storage portion (1) of the apparatus may be the CD ROM or a RAM (random access memory) mounted in the apparatus.

In addition, the program (13) is an executing program for a motion picture file or a voice file. The Media Player produced by Microsoft of the U.S.A. may be selected for the program (13).

A switch, a slider, a mouse, or a joystick may be selected for the input portion (9) inputting the input control signals to the control portion.

The control portion (5) receives the input control signal from the input portion (9) and executes the multimedia files (11) stored in the storage portion (1). That is to say, after executing the first file, the control portion (5) gets information about the executing time of an executed multimedia file from the timer (3) or directly reads time information of the multimedia file. After a time interval passes in accordance with the first file's executing time designated by a control signal, the control portion (5) executes a second file. Then, the control portion (5) makes the executed files output via the multimedia output portion (7), which is a monitor (15), a speaker (17), or the like.

The multimedia files (11) stored in the storage portion (1) may be sequentially or randomly selected by the control portion (5). If the file is randomly selected, it is efficient for the foreign language training method according to the present invention that all the multimedia files (11) are selected preferably without repetition.

As mentioned above, the executing time of the multimedia file is measured when the file is executed in the control portion (5), or it is read from the time information of each file. At this point, the executing time serves as a standard value (100%) of the time interval, such that the time interval is adjusted with respect to the executing time. That is to say, the time interval can be variously set to 150%, 140%, ..., 80%, or 70%, et al. of the executing time depending on the learner's ability. For example, if the learner starts the language training for the first time, the time interval may be set to 130% of the executing time such that the training proceeds with relatively low speed. Then, to improve the learner's fluency in speaking, the time

interval may gradually decrease to 70 % of the executing time such that the training proceeds with relatively high speed.

In addition, the learner himself can manually determine the time interval. In that case, the input portion (9) such as the switch, arrow keys of a keyboard, or buttons of a mouse is used to set the time interval.

FIG. 2 is a flow chart showing the foreign language training method according to the second preferred embodiment of the present invention. In "S1", at first, a total executing number "j", which is the number of times of repeating a set of the total files, is determined depending on a user's decision, and a total executed number "i" is initialized to 1. After the total executing number is determined, an integer "n" is selected from numbers 1 to "M" ("M" is the number of multimedia files to execute) in "S2", and the selected number of files are executed in "S3".

After the files are executed, whether the user, the learner, wants to have a time interval or not is determined in "S4". If the time interval is not selected, the training proceeds without the time interval in "S5". If the time interval is selected, whether the user set a condition of the time interval or not is determined in "S6". Then, if the user set the condition, the time interval is applied in accordance with the condition, in "S7". If the user does not set the condition, the time interval is applied in accordance with a preset condition, in "S8". For example, the same time interval as the executing time of the file may be applied.

Thereafter, whether the multimedia files are sequentially or randomly executed is determined in "S9".

In case of the sequential execution, a next integer "n+1" is designated for the integer "n" in "S10", and whether the newly designated integer is larger than "M",

which is the number of files, or not is determined in "S11". If the newly designated integer is not larger than "M", the newly designated integer "n" is stored in "S12" and the flow returns to "S3" of executing a file. If the newly designated integer is larger than "M", it means that all the files are respectively executed. Therefore, the total executed number "i" is increased by 1 in "S13", and whether the total executed number "i" increased is larger than the total executing number "j" or not is determined in "S14". If the total executed number "i" increased is larger than "j", because the needed repetition is completed, the flow is stopped. If "i" is not larger than "j", however, the flow returns to "S2" of selecting the integer.

In case of the random execution, whether any integer selected from 1 to "M" but not stored in the step of "S10" exists or not is determined in "S15". If some integers exist, one integer is selected from them in "S16" and stored in the step of "S12" such that the flow proceeds again. If there is no integer different from the integers stored in the step of "S12", it means that there exists no files not executed or all the files are respectively executed. Therefore, the total executed number "i" is increased by 1 in "S13", and whether the total executed number "i" increased is larger than the total executing number "j" or not is determined in "S14". If the total executed number "i" increased is larger than "j", because the needed repetition is completed, the flow is stopped. If "i" is not larger than "j", however, the flow returns to "S2" of selecting the integer.

Tough the preferred embodiments according to the present invention were explained, they are just examples of the present invention and the present invention is not limited to the preferred embodiments.

For example, before the steps in connection with the time interval proceed, a step of providing an orally narrated fairy tale may be added.

In addition, the multimedia files adopted for the present invention may be provided via a slide.

However, those modification and variation are disclosed by the present invention, because they come within the scope of the appended claims of the present invention.

[INDUSTRIAL APPLICABILITY]

In the present invention, the time interval is designated depending on the length of sentence or conversation composed in a foreign language such that the learner can learn the foreign language with a higher efficiency. In addition, because the learner can select a proper time interval and a proper training speed, the training corresponds to the learner's ability and attainment.

Further, because the random execution as well as the sequential execution is performed, an experienced learner who experiences the training a plurality of times can avoid problems in the next situation.

Furthermore, when the multimedia files composed in a native language are executed, the learner can properly exercise interpretation skills, which serves as important training method to learn a foreign language.

[CLAIMS]

[CLAIM 1]

A foreign language training apparatus comprising:

a storage portion storing a plurality of language lesson multimedia files and a program used for executing the multimedia files;

a checking means for checking executing time of the multimedia files;

a control portion that, depending on input control signals, selects a first file among the plurality of files stored in the storage portion, executes the first file using the program stored in the storage portion, executes a second file that is different from the first file after a time passes in accordance with the first file executing time checked by the checking means;

a multimedia output portion outputting the executed multimedia files depending on an output control signal applied from the control portion; and

an input portion inputting the input control signals to the control portion.

[CLAIM 2]

The foreign language training apparatus of claim 1, wherein the multimedia files are voice files composed in a native language or motion picture files including the voice files.

[CLAIM 3]

A foreign language training method using a multimedia having a plurality of language lesson multimedia files, the method including:

a step of executing a first file of the plurality of multimedia files using the multimedia;

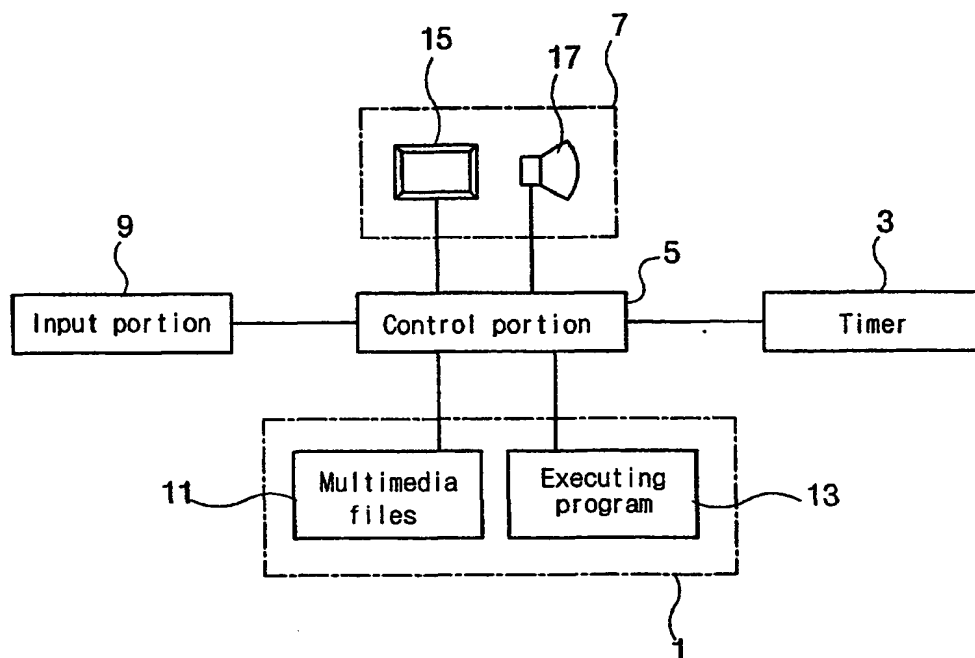
a step of checking the executing time of the first file; and

a step of executing a second file using the multimedia after a time passes in accordance with the checked executing time.

[CLAIM 4]

The foreign language training method of claim 3, wherein an executing file is randomly selected among the plurality of multimedia files without repetition until all the files are executed.

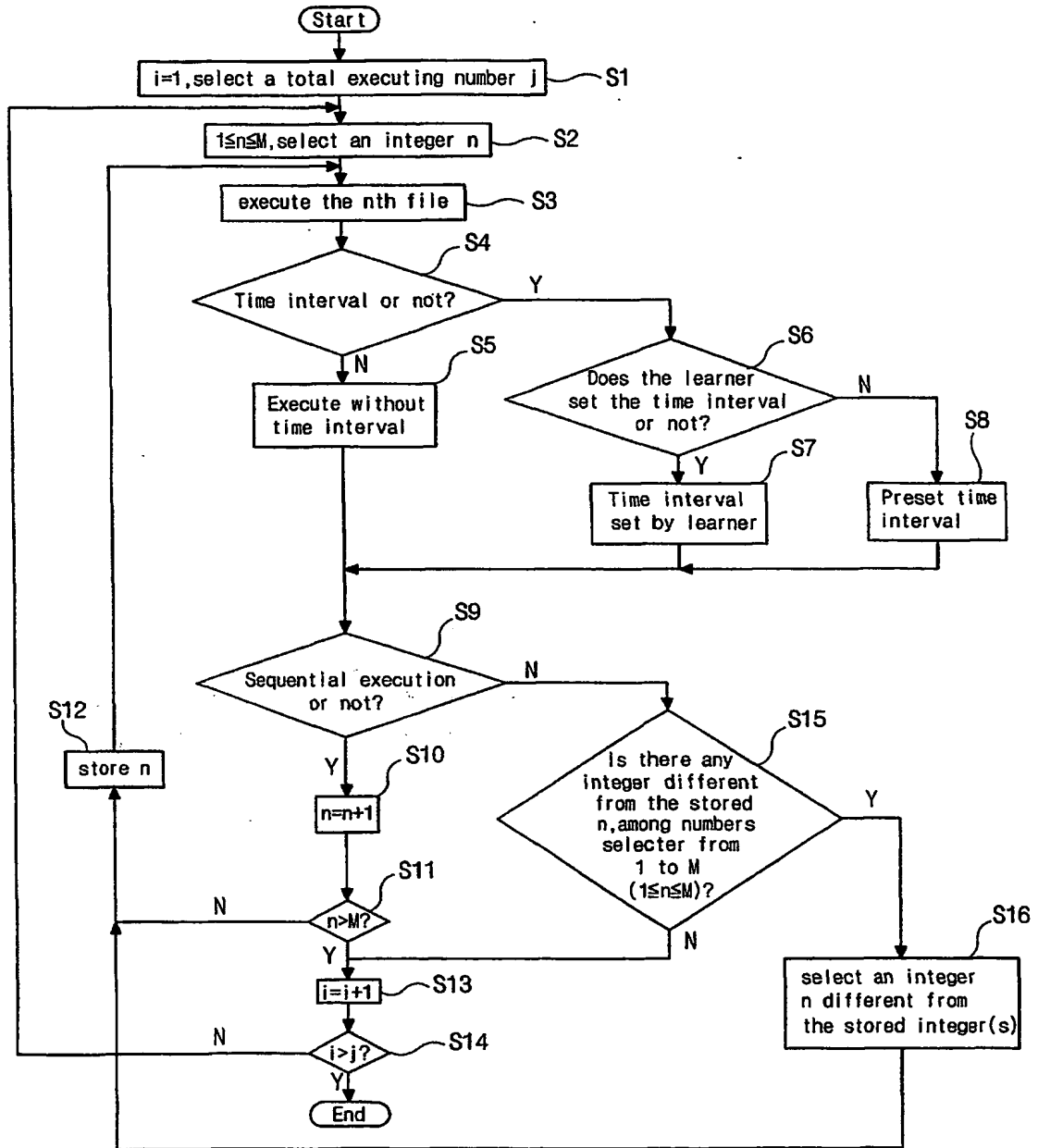
[FIG. 1]



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[FIG. 2]



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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC7 G06F 3/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) IPC7 G06F 3/00, G11B 15/00		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975 Korean Utility models and applications for Utility models since 1975		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, Y	KR 99-798 A (LEE, SEK-YEN) 15 JAN 1999 * the whole document	1 - 4
Y	KR 98-4868 A (YOUN, MAN-HEE) 30 MAR 1998 * the whole document	1 - 4
A	KR 99-30683 A (KIM, DONG-HYUN) 06 MAY 1999 * the whole document	1 - 4
A	KR 98-61663 A (DAEWOO ELECTRON LTD.) 07 OCT 1998 * the whole document	1 - 4
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search 06 SEPTEMBER 2001 (06.09.2001)		Date of mailing of the international search report 11 SEPTEMBER 2001 (11.09.2001)
Name and mailing address of the ISA/KR Korean Intellectual Property Office Government Complex-Daejeon, Dunsan-dong, Seo-gu, Daejeon Metropolitan City 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer CHO, Hyung Hee Telephone No. 82-42-481-5991



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A. CLASSIFICATION OF SUBJECT MATTER**IPC7 G06F 3/00**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G06F 3/00, G11B 15/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, Y	KR 99-798 A (LEE, SEK-YEN) 15 JAN 1999 * the whole document	1 - 4
Y	KR 98-4868 A (YOUN, MAN-JEE) 30 MAR 1998 * the whole document	1 - 4
A	KR 99-30683 A (KIM, DONG-HYUN) 06 MAY 1999 * the whole document	1 - 4
A	KR 98-61663 A (DAEWOO ELECTRON LTD.) 07 OCT 1998 * the whole document	1 - 4

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CHO, Hyung Hee

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PATENT COOPERATION TREATY

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NOTIFICATION OF THE RECORDING
OF A CHANGE

(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

JUNG, Won-Ki
Hankook Bldg., 8th Fl.
831-3 Yeoksam-dong
Kangnam-gu
Seoul 135-080
RÉPUBLIQUE DE CORÉE

Date of mailing (day/month/year) 14 December 2001 (14.12.01)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference OPP10111PCT	
International application No. PCT/KR01/00680	International filing date (day/month/year) 24 April 2001 (24.04.01)

1. The following indications appeared on record concerning: <input checked="" type="checkbox"/> the applicant <input checked="" type="checkbox"/> the inventor <input type="checkbox"/> the agent <input type="checkbox"/> the common representative		
Name and Address BAE, Sang-Hyun	State of Nationality KR	State of Residence KR
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: <input checked="" type="checkbox"/> the person <input type="checkbox"/> the name <input type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence		
Name and Address BAE, Sang-Hyun	State of Nationality KR	State of Residence KR
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3. Further observations, if necessary: The person in box No. 2 will be the inventor/applicant for US only.		
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The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Ki-Nam HA Telephone No.: (41-22) 338.83.38
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